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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,815	03/23/2005	Takashi Ishii	268185US3PCT	4193
22850	7590	02/01/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			KRUER, STEFAN	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/528,815	Applicant(s) ISHII ET AL.	
	Examiner Stefan Kruer	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/23 & 06/17/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 2, and 4 – 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Aulanko, et al (5,429,211).

Re: Claim 1, Aulanko anticipates:

- a cage (1) guided by a pair of right and left-side guide rails (10);
- a traction sheave (7) disposed behind and near one of the guide rails (Fig. 2), with traction sheave being driven in a rotational axis;
- a driving apparatus (6) disposed behind the traction sheave;
- a counterweight (9) guide by a pair of guide rails (11) for vertical motion;
- a pair of right and left cage side sheaves (4 and 5) that suspend the cage and extend at a direction angle close to that of the rotational axis of the traction sheave (Fig. 4b);
- and a hoist rope (3) composed of a plurality of ropes wound around the traction sheave, said hoist rope suspending both cage and counterweight.

Re: Claim 2, Aulanko anticipates the cage-side rails extending to the top of the shaft (Fig. 4a, per mounting to 16).

Re: Claim 4, Aulanko anticipates an angle between the rotational axis of the traction sheave and those of the cage-side sheaves being 45° (Fig. 4b).

Re: Claim 5, Aulanko anticipates the cage-side sheaves being disposed near the right and left sidewalls of the cage (Fig. 2).

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Re: Claim 6, Aulanko anticipates the disposition of the cage-side sheaves within a vertical projection of the cage as depicted in Figure 2 and stated as "...obvious that the hoisting ropes need not necessarily be passed under the car" (Col. 8, Line 30).

Re: Claim 7, Aulanko anticipates the cage-side sheaves be disposed symmetrically with respect to the center of the cage as depicted in Figure 4b and furthered by "Passing the ropes diagonally or otherwise obliquely ... which (sic) is an advantageous solution ...to ensure that the car is symmetrically suspended on the ropes with respect to the center of mass of the car" (Col. 8, Line 44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aulanko in view of Wittur, et al (WO 02/053486).

Re: Claim 3, though Aulanko anticipates a plurality of ropes, he is silent regarding their diameters. Wittur, however, teaches ropes having a diameter of 5 to 7 mm and preferably less than 6 mm (Page 5), thereby affording an incrementally finer sizing for the anticipated (rated) service loads of the cage as well as enhanced effectiveness in lubricating and cleaning the ropes, when compared to the implementation of ropes of larger diameters. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Aulanko with the teachings of Wittur to exploit the sizing, and therein also the commercial-, and performance features of Wittur.

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Re: Claims 8 and 9, though the driving apparatus and thereto-coupled traction sheave of Aulanko are mounted outside of the bounds of the cage, the corresponding devices of Wittur are alternatively mounted above the cage and thereby overlap the cage when seen from a vertical direction (Figures 2 and 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Aulanko with the teachings of Wittur in order to eliminate/minimize the twisting of the drive/suspension ropes for enhanced service life, reduced torque (hence load) and, thereby, smaller drive capacities and the associated installation, operation and maintenance costs.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bianca Edoardo (3,101,130) and Hamaguuchi (6,626,266) are cited for reference of elevator systems whereby the cage and counterweight are rail guided, and the drive device overlaps the horizontal cross-sectional view of the cage, said rails being paired and mounted on opposite sides of their respective devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F, 09:00 - 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571.272.6951. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK 

12 Jan. 2006


KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600